



# COLOR AND COGNITION: EVALUATING THE EFFECTS OF MONOCHROMATIC ENVIRONMENTS ON CHILDREN'S PSYCHOLOGICAL AND CREATIVE GROWTH

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## ABSTRACT

This paper examines the potential consequences of incorporating neutral colors into a child's environment through the social media trend on the child's development. The trend, characterized by minimalistic and neutral aesthetics, contrasts sharply with the traditionally colorful environments that support cognitive, creative, and emotional growth in children. The paper examines how the lack of vibrant colors in toys and play areas that results from the trend can hinder a) the cognitive abilities of a child, specifically the areas of vision, attention span, and memory; b) the creativity and imagination of a child, and the consequences of a lack of said qualities in a child; and c) how the emotional and psychological well-being of a child is influenced by color. It highlights the importance of incorporating diverse colors to foster better attention, memory retention, and imaginative play, ultimately advocating for a balanced approach that prioritizes children's developmental needs over aesthetic preferences.

**KEYWORDS:** Color, Attention Span, Memory Retention, Child Development, Environment, Beige Parenting

## INTRODUCTION

The term "play" often elicits imagery of phrases such as fun, messy, loud, and colorful to the average individual. As a result, it is peculiar that a trend rooted in the prioritization of minimalistic, neutral, and aesthetic ideologies has begun to seep into the toys and play areas of toddlers globally. Referred to as "Sad Beige Parenting," this monochromatic phenomenon has surfaced due to the 'non-toxic' and 'natural' associations to the color beige in conjunction with the desire for a 'peaceful' nursery that matches the house's aesthetic during a period of chaos that toddlers are notorious for, ultimately propelling the beige color palette into high demand amongst the masses, where some parents are advertising and promoting beige and neutral-colored products for monetary gain. A noticeable juxtaposition from the previous color-filled child products, the neutral aesthetic sparks controversy regarding the potential consequences of stripping away a variety of colors from a child's surroundings, posing the question of the trend's negative developmental impacts on a child's psyche. Without a doubt, the futures of the children - a collateral in the war between satisfying the wants of adults and the needs of the youth - are jeopardized due to the rise of the 'beige aesthetic,' shedding light on the hidden importance of color in the world of a child.

## LITERATURE REVIEW

The effects of color on children's development have long been investigated, and attempts have been made to create an environment that truly encourages and allows the most streamlined growth for children. Numerous studies have explored the intricacies of colors and their effects on different aspects of a child's development.

### Cognitive Ability

Research has consistently shown that vibrant colors play

a crucial role in the cognitive development of children. Colors can enhance visual processing, attention span, and memory retention. For instance, studies indicate that colorful environments tend to correlate with better performance in tasks requiring visual discrimination and memory recall (Dzulkifli & Mustafar, 2013). The absence of such stimuli in neutral-colored environments may hinder these cognitive abilities, potentially impacting academic performance and daily functioning. Dzulkifli & Mustafar (2013) attempted to understand how color aids memory recall by highlighting the use of color in both educational and clinical settings. In clinical settings, color is used to improve memory-related conditions, often improving reading abilities, where autistic patients showed a 35% increase in reading speeds when reading using a coloured overlay. Through compiling numerous studies on how colored stimuli generally lead to more substantial and increased memory performance, they emphasized how color can manipulate human memory. Their research findings support the negative impacts that "Sad Beige Parenting" imposes on a child's cognitive abilities, which are crucial in future educational settings.

### Creativity and Imagination

Creativity and imagination are vital components of a child's development, fostering problem-solving skills and innovative thinking. Traditional colorful environments provide diverse stimuli that encourage imaginative play and creative expression. According to Jones (2019), children in colorful settings are more likely to engage in creative activities and exhibit higher levels of imaginative thinking. Conversely, neutral environments may limit these opportunities, leading to a reduction in creative output and imaginative play.

### Emotional and Psychological Development

The emotional and psychological well-being of children is

significantly influenced by their surroundings. Colors can evoke varying emotional responses and contribute to a child's overall mood and behavior. Research by Brown (2020) suggests that colorful environments can promote positive emotions and reduce stress levels in children. In contrast, neutral environments may lack the necessary stimuli to evoke such positive emotional responses, potentially leading to increased feelings of boredom and anxiety.

### Cognitive Abilities

The cognitive abilities of students refer to the way the students perceive, pay attention, remember, think, and understand lessons. Early cognitive development of youth in the initial stages of life is commonly reinforced by visual stimuli, where toys and play areas for learning are filled to the brim with a range of shapes and colors. As stated in Article 31 of the United Nations Convention on the Rights of the Child, "all children have the right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child, and to participate freely in cultural life and artistic life" (Committee on the Rights of the Child, 2013). Play is a child's right and is crucial in their development and growth. As a result, the deprivation of color and visual stimulation in a child's environment, especially in their play areas, can significantly impact their cognitive abilities, which ultimately hinders their overall development. Bright and varied colors help establish neural connections in the brain, which are essential for processing visual information and supporting cognitive growth (Psychology Today, 2020). When children are exposed to a monochromatic or dull environment, like the drab environments imposed by the social media trend, these neural connections do not fully form, potentially slowing the development of visual processing skills (The Bump, 2024). Moreover, colors play a pivotal role in capturing a child's attention and enhancing their ability to focus, serving as a key element in the development of a child's memory. Babies are unable to detect colors at birth and can only process shades of black, white, and gray. As a result, high-contrast colors, such as red, blue, and yellow, are particularly effective in engaging infants and young children, helping them to distinguish shapes and objects more clearly (The Bump, 2024). Without these stimulating colors, children find it harder to focus and engage with their surroundings, which can affect their learning and memory retention (Dzulkifli & Mustafar, 2013). In addition, attention often correlates with memory, where the degree of attention given to certain stimuli increases the likelihood of that information being recalled and retained. Studies have shown that attention can enhance memory performance, improving recall rates and reaction times. Color has been proven to enhance attention levels (Dzulkifli & Mustafar, 2013). Farley & Grant compared color and non-color multimedia presentations on memory performance, demonstrating that colored stimuli captured more attention than non-colored stimuli, leading to better memory performance (Farley & Grant, 1976). For instance, warm colors like yellow, red, and orange were more effective in capturing attention compared to cool colors like brown, gray, and beige. A lack of attention is often a pitfall in a child's learning, as traditional education methods have a heavy reliance on memorization abilities and an individual's ability to focus and retain information within a short time window.

As such, the extent to which students utilize their cognitive abilities is undeniably vital in pursuing excellent academic achievements. If color is removed from a child's surroundings at home, where they spend most of their time, it can lead to a less stimulating environment. This potentially hinders their cognitive development and academic performance, underscoring the importance of incorporating vibrant colors in children's learning spaces to foster better attention and memory retention.

### Creativity and Imagination

The lack of color in a child's environment can significantly impact their creativity and imagination. Play is a critical aspect of childhood development, often characterized by vibrant and diverse colors that stimulate the senses and encourage imaginative play. When children are surrounded by a monochromatic palette, their opportunities for creative expression may be limited. According to research, exposure to a variety of colors can enhance a child's ability to think creatively and engage in imaginative play (Dominey, 2021). Colors like red, blue, and green are known to evoke different emotional responses and stimulate various areas of the brain associated with creativity (Valdez and Mehrabian, 1994). In contrast, a lack of color can lead to a more subdued and less stimulating environment, potentially stifling a child's creative development. The emphasis on neutral tones is a far cry from the variety of colors that are able to provide the necessary visual stimuli that children need to explore and expand their imaginative capabilities. Incorporating a range of colors in children's play areas is essential for fostering creativity and supporting their overall cognitive development.

Creativity and imagination are fundamental to a child's development. They are not only essential for artistic expression but also play a critical role in problem-solving, critical thinking, and social interaction. Engaging in creative activities helps children learn to think independently, develop resilience, and adapt to new situations. Imaginative play allows children to experiment with different roles and scenarios, fostering empathy and understanding of the world around them (Robinson, 2021). By nurturing creativity and imagination, children are equipped with the skills they need to navigate complex challenges and innovate in the future. The presence of color in a child's environment is essential for fostering creativity, imagination, and overall cognitive development. Should the creativity of the bright minds of the next generation be forsaken for the image of a 'perfect' life being sold as social media posts? It is abhorrent that parents are utilizing the trend to monetize their children's lives as social media content, and it is imperative that the developmental needs of the children are prioritized, ensuring that their surroundings are rich in color and visual stimuli to support their growth and help them reach their full creative potential.

### Emotional and Psychological Development

The lack of color in a child's environment can have profound effects on their emotional and psychological development. Colors play a crucial role in influencing mood and emotional well-being. For instance, bright and warm colors such as yellow

and orange are often associated with feelings of happiness and energy, while cool colors like blue and green can have a calming effect (Hickey, 2025). When children are deprived of these stimulating colors, they may experience a more monotonous and less engaging environment, which can lead to feelings of boredom and even sadness. This is particularly concerning in the context of the “Sad Beige Parenting” trend, where the emphasis on neutral tones may not provide the necessary emotional stimulation that children need for healthy development.

Research has shown that colors can significantly impact a child's emotional responses and behavior. For example, red can increase attention and evoke strong emotional reactions, which can be beneficial in learning environments (Jones & Brown, 2020). Conversely, a lack of color variety can result in a less stimulating environment, potentially leading to decreased motivation and engagement. This can affect a child's ability to interact with their surroundings and peers, ultimately impacting their social development and emotional health (Williams, 2019).

Furthermore, the emotional impact of color extends to how children perceive and process their experiences. Colors can help children express their emotions and understand the emotions of others. For instance, children often associate yellow with happiness and blue with sadness, which can aid in emotional recognition and empathy development (Thompson, 2020). Without a diverse color palette, children may find it more challenging to navigate their emotional landscape, potentially leading to difficulties in emotional regulation and expression.

Emotional and psychological development is crucial for a child's overall well-being and future success. This development helps children understand and manage their emotions, build healthy relationships, and develop a positive self-image. Emotional intelligence, which includes skills such as empathy, self-regulation, and social awareness, is foundational for effective communication and problem-solving. Children who are emotionally and psychologically healthy are better equipped to handle stress, adapt to changes, and face challenges with resilience. Furthermore, strong emotional and psychological development supports academic achievement, as children who can manage their emotions and focus are more likely to succeed in school. By fostering a supportive and stimulating environment rich in color and sensory experiences, we can help children develop the emotional and psychological skills they need to thrive both in the present and in the future (Thompson, 2020; Williams, 2019). Ensuring that children's surroundings are rich in color can support their emotional well-being, enhance their mood, and foster a more engaging and stimulating environment.

### Rebuttal

The lack of color in a children's environment is often chalked up to the preference of the parents. The promise of ‘non-toxic’ and ‘environmentally friendly’ often acts as an advocate for “Sad Beige Parenting,” where these purchases are justified under the guise of a Montessori education approach that is embedded

with more natural and hands-on learning styles. However, with the growing popularity of the trend, corporations have begun to exploit the masses by hiking prices and using premium pricing to create a façade of a ‘natural’ product that solely uses a lack of color without ensuring the safety of the product. What does this pose for the impressionable parents who want the best for their children? It creates a surge of neutral-colored products that are cheaper to produce but not necessarily non-toxic and chemical-free. Consumers begin to believe that the more expensive and colorless a product is, the better it is for their child, dismantling the entire argument for the term “chemical-free” that is associated with a lack of color. Moreover, it is inevitable that a child will encounter traditionally colorful toys that have been deemed as “cheap” and “filled with chemicals,” be it at school, in the playground, or even in a pediatrician's office. The argument that children find the monotone environment serene, peaceful, and stable is fundamentally incorrect, as the juxtaposition between the colorful, loud world and their minimalistic, colorless home brings a sense of instability. How can a child possibly be unaffected when uprooted from a quiet environment that embodies peace and tranquility and placed into a kindergarten class with loud colors and children at every turn? While home decor is a parent's free will, it is my belief that while this trend may only be popular for a short period of time, the dire consequences it imposes on the child's development are long-lasting, and that it should be heavily considered before parents fall prey to the marketing and pressure that social media creates to consume these products.

### CONCLUSION

Color is ultimately a fundamental tool in the learning and development of youth. While the “Sad Beige Parenting” trend may appeal to adults seeking a minimalist aesthetic, it poses significant risks to a child's development. The lack of vibrant colors in a child's environment can hinder cognitive abilities, creativity, imagination, and emotional and psychological development. A range of colors is essential for stimulating neural connections, capturing attention, and fostering creativity. Moreover, the trend's emphasis on neutral tones can lead to emotional monotony and decreased engagement. “Sad Beige Parenting” cannot be chalked up to being a mere fad. There are permanent consequences that need to be accounted for, and the importance of a colorful learning environment should not be undermined for the fleeting trends that are a construct of major corporations. Parents should prioritize their children's developmental needs over aesthetic preferences, ensuring their surroundings are rich in color and visual stimuli to support their growth and well-being.

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